JOURNAL OF ORGANOMETALLIC CHEMISTRY

Vol. 413, Nos. 1–3 August 7th, 1991

CONTENTS

Introduction
by W.E. Watts (Londonderry) xi

Regular papers

Recent developments in studies of organic calomels
by O.A. Reutov and K.P. Butin (Moscow) (Rec'd November 22nd, 1990) 1

Mehrfachbindungen zwischen Hauptgruppenelementen und Übergangsmetallen. XCIII. Methyl- und Ethylrheniumoxide: Präparative und strukturchemische Aspekte
von W.A. Hermann, C.C. Romao, P. Kiprof, J. Behm, M.R. Cook und M. Taillefer (Garching) (Eing. den 4. Januar 1991) 11

Mehrfachbindungen zwischen Hauptgruppenelementen und Übergangmetallen. XCIV. Pyridin-Komplexe organischer Osmiumoxide: Synthese, Spektren und Kristallstrukturen der Stoffklassen $R_2OsO_2 \cdot (L)$ und $R_2OsO_2 \cdot (L)_2$
von W.A. Herrmann, S.J. Eder und P. Kiprof (Garching) (Eing. den 18. Dezember 1990) 27

Organotin(IV) compounds 2-$(Me_2NCHR)C_6H_4(SnR'R''Br)$ with a fixed *s-cis* arrangement of the chiral carbon and tin centers. Crystal structure of 2-$(Me_2NCHBu^t)C_6H_4SnMePhBr$
by J.T.B.H. Jastrzebski, J. Boersma and G. van Koten (Utrecht) (Rec'd July 10th, 1990; in revised form September 13th, 1990) 43

Enantioselektive Katalysen. LIX. Addition von optisch aktiven P–H-Verbindungen an *P*-substituierte Olefine
von H. Brunner und S. Limmer (Regensburg) (Eing. den 2. August 1990) 55

Mehrkernige Ferrocenderivate mit Chalkogenbrücken
von M. Herberhold, H.-D. Brendel, O. Nuyken und T. Pöhlmann (Bayreuth) (Eing. den 11. Januar 1991) 65

Organolanthanide hydroxides; the synthesis and crystal structures of the samarocene and ytterbocene hydroxides $[\{SmCp''_2(\mu\text{-}OH)\}_2]$ and $[\{YbCp'_2(\mu\text{-}OH)\}_2]$ [$Cp'' = \eta^5\text{-}C_5H_3(SiMe_3)_2$-1,3; $Cp' = \eta^5\text{-}C_5H_4SiMe_3$]
by P.B. Hitchcock, M.F. Lappert and S. Prashar (Brighton) (Rec'd April 26th, 1991) 79

Synthesis and reactivity of η^6-arene derivatives of niobium(II), niobium(I), and niobium(0)
by F. Calderazzo, G. Pampaloni, L. Rocchi (Pisa), J. Strähle and K. Wurst (Tübingen) (Rec'd January 7th, 1991) 91

The formation and reactions of some new functionally substituted derivatives of (η^5-cyclopentadienyl)dicarbonylnitrosylchromium (cynichrodene)
by M.D. Rausch and Y.-P. Wang (Amherst, MA) (Rec'd October 11th, 1990) 111

Microbial resolution of organometallic planar chirality. Enantioselective reduction of *ortho*- and *meta*-substituted tricarbonylchromium benzaldehydes by bakers' yeast
by S. Top, G. Jaouen (Paris), C. Baldoli, P. Del Buttero and S. Maiorana (Milan) (Rec'd December 17th, 1990) 125

Regioselective complexation of 1,2 : 9,10-dibenzo[2.2]paracyclophane-1,9-dienes
by O. Reiser and A. de Meijere (Hamburg) (Rec'd December 18th, 1990) 137

Chromium aminocarbene complexes in organic synthesis
by M.A. Schwindt, J.R. Miller and L.S. Hegedus (Fort Collins, CO) (Rec'd December 19th, 1990) 143

The study of catalyst effects on the complexation of arenes with $Cr(CO)_6$. An overview
by M. Hudeček, V. Gajda and Š. Toma (Bratislava) (Rec'd January 16th, 1991) 155

Acid catalysed complexation of arenes with $Cr(CO)_6$
by P. Hrnčiar and Š. Toma (Bratislava) (Rec'd January 16th, 1991) 161

Übergangsmetall-Carbin-Komplexe. XCIX. Synthese und Röntgenstruktur von (η^5-C_5Me_5)-$(CO)_2Mo{\equiv}CNEt_2$, dem ersten, niedervalenten Diethylaminocarbin-Komplex von Molybdän mit einem Pentamethylcyclopentadienyl-Liganden
von A.C. Filippou, W. Grünleitner, E.O. Fischer (Garching), W. Imhof und G. Huttner (Heidelberg) (Eing. den 23. April 1990) 165

CC-coupling reactions at low-valent molybdenum centers. Selective formation of η^2-iminoacyl, η^3-1-azaallyl and η^2-1,4-diazabutadien-2-yl complexes of molybdenum from ethyl isocyanide complexes
by A.C. Filippou, W. Grünleitner, C. Völkl and P. Kiprof (Garching) (Rec'd January 28th, 1991) 181

Reactions of molybdenum and tungsten η^2-*C*,*C*-vinyl complexes [M{η^3-C(CF_3)C(CF_3)SR}-(CF_3C≡CCF_3)(η^5-C_5H_5)] with alkynes leading to novel metallacycles
by L. Carlton, N.M. Agh-Atabay and J.L. Davidson (Edinburgh) (Rec'd October 29th, 1990) 205

A tunstendiiron cluster [NEt_4][WFe_2\{μ_3-η^3,η^5-CH=C=C(^{t}Bu)C(O)$C_2B_9H_8Me_2$\}$(CO)_8$] derived from [$Fe_2(CO)_9$] and [NEt_4][W(≡CC≡C^{t}Bu)$(CO)_2$(η^5-$C_2B_9H_9Me_2$)]
by N. Carr, S.J. Dossett and F.G.A. Stone (Bristol) (Rec'd November 30th, 1990) 223

Nucleophilic addition to η^6-arenetricarbonylmanganese cations—the role of intermediates in the reactions with phosphines
by D.A. Brown, W.K. Glass and K.M. Kreddan (Dublin) (Rec'd September 27th, 1990) 233

Syntheses of deuterated sandwich- and piano-stool organo-iron complexes and polyalkylbenzenes
by J.-R. Hamon, P. Hamon, S. Sinbandhit, P. Guenot (Rennes) and D. Astruc (Talence) (Rec'd November 6th, 1990) 243

Stable carbocations. XXIII. Generation and isolation of salts of ferrocenyl(alkoxy)methylium cations and their intermediacy in acid-promoted acetal hydrolysis
by T.P.E. Kenny, A.C. Knipe and W.E. Watts (Coleraine) (Rec'd November 13th, 1990) 257

Preparation and thermal properties of 4-alkoxy-4′-cyanobiphenyl esters of ferrocene dicarboxylic acid
by J. Bhatt, B.M. Fung and K.M. Nicholas (Norman, OK) (Rec'd November 13th, 1990) 263

Evidence for correlated rotation and diastereoisomer discrimination in (η^4-diene)$Fe(CO)_2L$ complexes: the crystal and solution structures of (cyclohexadiene)$Fe(CO)_2P(o\text{-tolyl})_3$ and (cycloheptadiene)$Fe(CO)_2$(+)-PPh_2(neomenthyl)
by J.A.S. Howell, M.G. Palin, M.-C. Tirvengadum (Keele), D. Cunningham, P. McArdle (Galway), Z. Goldschmidt and H.E. Gottlieb (Ramat-Gan) (Rec'd December 17th, 1990) 269

Crystal and molecular structure of a segment of a stacked face-to-face ferrocene polymer
by B.M. Foxman, D.A. Gronbeck and M. Rosenblum (Waltham, MA) (Rec'd December 20th, 1990) 287

Asymmetric synthesis catalyzed by chiral ferrocenylphosphine-transition metal complexes. IX. Preparation of chiral ferrocenylbisphosphines containing an aminoalkyl side chain
by T. Hayashi and A. Yamazaki (Sapporo) (Rec'd January 18th, 1991) 295

The Ru(η^6-naphthalene)(η^4-1,5-cyclooctadiene)/acetonitrile system as a homogeneous catalytic precursor for the fast isomerization of 1,5-cyclooctadiene and 1-hexene
by P. Pertici, G. Uccello Barretta, F. Burzagli, P. Salvadori (Pisa) and M.A. Bennett (Canberra, A.C.T.) (Rec'd December 11th, 1990) 303

The stereoselective nucleophilic addition of cyanide to the cationic ruthenium complexes [(η^5-C_5H_5)L_2Ru=C=C(Me)Ph]$^+$ (L_2 = $(PMe_3)_2$ or $(PPh_2CH_2)_2$)
by S.G. Davies and A.J. Smallridge (Oxford) (Rec'd January 7th, 1991) 313

Tetranuclear rhodium–triruthenium carbonyl clusters containing phosphorus(III) ligands; crystal and molecular structure of [$RhRu_3(\mu\text{-H})_2(\mu\text{-CO})(CO)_7(PPh_3)_2$($\eta^5$-$C_5H_5$)]
by J.-L. Le Grand, W.E. Lindsell and K.J. McCullough (Edinburgh) (Rec'd December 17th, 1990) 321

The preparation and aspects of the chemistry of some tertiary-phosphine, arsine and stibine complexes of hexaosmium clusters
by B.F.G. Johnson, J. Lewis, M.-A. Pearsall and L.G. Scott (Cambridge) (Rec'd December 7th, 1990) 337

Thiophendioxid-Komplexe des Cobalts
von R. Albrecht und E. Weiss (Hamburg) (Eing. den 12. November 1990) 355

Cycloadditionsreaktionen von Organometallkomplexen. XIII. Synthese und Reaktivität viergliedriger Cobalta-Heterocyclen aus $C_5H_5Co(CNR)(PMe_3)$ und Isocyanaten bzw. Isothiocyanaten sowie eine ungewöhnliche Fragmentierung des chiralen Isocyanid-Liganden (*S*)-CNCH(Me)Ph
von H. Werner und B. Strecker (Würzburg) (Eing. den 19. Dezember 1990) 379

The stereochemistry of organometallic compounds. XXXVI. Rhodium-catalysed reactions of unsaturated amines with hydrogen and carbon monoxide. A new synthesis of 2-piperidinones
by D. Anastasiou and W.R. Jackson (Clayton, Vic.) (Rec'd August 28th, 1990) 399
Catalytic hydrogenation of the phosphorus–carbon double bond in phosphaalkene complexes
by R. de Vaumas, A. Marinetti and F. Mathey (Palaiseau) (Rec'd October 22nd, 1990) 411
Three-membered metallacycle $Cp_3Rh_3(\mu\text{-}CO)_3$ as a cluster and benzenoid system in reactions with 12-electron particles PPh_3M^+ (where M = Cu, Ag, Au) and CpM^+ (where M = Fe, Ru)
by M.I. Rybinskaya, A.R. Kudinov, D.V. Muratov, N.P. Gambaryan, I.V. Stankevich and A.L. Chistyakov (Moscow) (Rec'd November 22nd, 1990) 419
Ring-methyl activation in pentamethylcyclopentadienyliridium complexes; synthesis of $[(C_5Me_4CH_2E)IrL_n]$ (E = $SiMe_3$, $PhCH_2$, $CH_2{=}CHCH_2$, PPh_2, and $Pt(PEt_3)_2Cl$), and synthesis and X-ray structure of $[(1,3\text{-}C_5Me_3(CH_2SiMe_3)_2)Ir(CO)Me(Cl)]$
by J.A. Miguel-Garcia, H. Adams, N.A. Bailey and P.M. Maitlis (Sheffield) (Rec'd December 17th, 1990) 427
Acetylenes and diazoketones in organic synthesis. Can a synthetic organic chemist avoid organometallic chemistry?
by F. Serratosa (Barcelona) (Rec'd November 26th, 1990) 445

Preliminary communications
Convenient one-pot synthesis of half-sandwich η-cycloheptatrienyl and η-toluene derivatives of the metals titanium and zirconium; crystal structure of $[Zr(\eta^6\text{-}C_6H_5Me)(PMe_3)_2Cl_2]$
by G.M. Diamond, M.L.H. Green and N.M. Walker (Oxford) (Rec'd November 9th, 1990) .. C1
Application of the Pauson–Khand reaction to the synthesis of pentalenic acid
by E.G. Rowley and N.E. Schore (Davis, CA) (Rec'd November 13th, 1990; rev'd January 18th, 1991) C5
Neue metallorganische Platin–Indium und Cobalt–Gallium Komplexe
von R.A. Fischer und J. Behm (Garching) (Eing. den 18. Dezember 1990). C10
Annulation of aryl rings and formation of pyrones involving depalladation of organometallic compounds
by M. Pfeffer, M.A. Rotteveel, A. de Cian, J. Fisher (Strasbourg) and G. le Borgne (Rennes) (Rec'd December 11th, 1990) C15

Author index C20

Subject index C22

The publisher does not levy page charges and supplies 25 free reprints of each paper.
Additional copies can be ordered if required.

Customers in the USA and Canada wishing information on this and other Elsevier journals, please contact Journal Information Center, Elsevier Science Publishing Company Inc., 655 Avenue of the Americas, New York, NY 10010. Tel.: (212) 989-5800. Fax: (212) 633-3990.

This journal is cited by the following Abstracting/Indexing Services:

Chemical Abstracts
Current Abstracts of Chemistry and Index Chemicus
Current Contents, Physical, Chemical & Earth Sciences
FIZ, Karlsruhe
Pascal (Centre de Documentation Scientifique et Technique)
Research Alert
Science Citation Index

Full texts are incorporated in CJELSEVIER, a file in the Chemical Journals Online database which is available on STN® International.